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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,616	03/08/2002	Takahiro Naka	Q68810	8662

7590 07/25/2003

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

TRAN, LY T

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,616

Applicant(s)

NAKA ET AL.

Examiner

Ly T TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 21, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 21, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I; claims 1-7 and 21 in Paper No. 11 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-4, 6-7, 21, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Shoki (USPN 6,360,174).

With respect to claims 1 and 21, Shoki discloses a color agent amount recording apparatus recording an amount of a print coloring agent comprising:

- An information obtaining portion obtaining information on an amount of the printing coloring agent that is consumed, wherein the amount was not uses in actual printing (Column 4: line 45-46)

- An information writing portion onto a recording medium the information on the amount obtained by the information obtaining portion (Column 7: line 43-46))

With respect to claim 2, Shoki discloses the recording medium is attached to a cartridge containing the printing color agent (Column 7: line 38-39).

With respect to claims 3, 26 and 27, Shoki discloses the printing coloring agent is ink, printer comprises at least one color agent and printer comprises at least one coloring agent cartridge (Column 4: line 1-4)

With respect to claim 4, Shoki discloses the amount not used in actual printing includes a residual amount of the printing coloring agent (Column 4: line 55-60)

With respect to claim 6, Shoki discloses the information obtaining portion obtains the information on the amount not used in actual printing for each of the colors of the printing coloring agent (Column 4: line 28-34) and the information writing portion writes onto the recording medium the information of each of the colors obtained by the information obtaining portion (Column 5: line 66-67, Column 6: line 1-6)

With respect to claim 7, Shoki discloses the apparatus being a part of a printing apparatus carrying out printing with the printing coloring agent (Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoki (USPN 6,360,174) in view of Suzuki (USPN 6,334,658).

Shoki fails to teach the amount not used in actual printing includes an amount of the print coloring agent used when maintenance of printing mechanism is carried out.

Suzuki teaches if the ink consumed quality and calculated ink consumed quality is not equal that meant there are some clog nozzles and the maintenance operation is executed (Fig.9: element 5,9, Column 12: line 36-41).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Shoki to have a additional step of the maintenance operation is executed if the ink consumed quality and calculated ink consumed quality is not equal that meant there are some clog nozzles as taught by Suzuki. The motivation to doing so is minimize executed maintenance operation therefore ink and printing time can be prevented from being wasted (Suzuki USPN 6,334,658, Column 2: line 49-53).

Response to Arguments

4. Applicant's arguments filed 5/9/03 have been fully considered but they are not persuasive.

First, Applicant's argument that Shoki does not disclose any capability to differentiate between ink that was used in printing and ink that was not used in printing, no consideration of ink which is consumed in non-printing operation, Shoki only

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determine the amount of ink left in a cartridge therefore when the printer is cleaned, Shoki's system is incapable of monitoring the ink loss was not persuasive because the ink left in the cartridge is ink not used in actual printing or ink in non-printing operation, furthermore, the claim only recite to obtain the amount of ink was not used in actual printing, nothing recite about the loss of ink in cleaning. Therefore, Shoki still meets the limitation of the claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 703-308-4896. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.



July 17, 2003



Stephen D. Meier
Primary Examiner